

IN THE CLAIMS

The pending claims are reproduced herein for the Examiner's convenience.

1. (Previously Presented) A method of forming a package, comprising:
placing a film against a flip-chip assembly, wherein the film includes a tacky film, wherein the flip-chip assembly includes a die, an electrical connection, and a mounting substrate;
underfilling the die with underfill material;
curing the underfill material; and
after beginning curing the underfill material, removing the film, wherein after beginning curing the underfill material and removing the film, curing includes heating the package in a curing oven under conditions to cause the tacky film to release from the flip-chip assembly.
2. (Canceled).
3. (Previously Presented) The method according to claim 1, wherein the film includes a tacky film, and wherein curing the underfill material is carried out under heat that causes the tacky film to release from the flip-chip assembly.
4. (Original) The method according to claim 1, wherein after beginning curing the underfill material and removing the film, curing includes:
curing the underfill material that is in contact with the film;
removing the film; and thereafter
curing the underfill material that is between the die and the mounting substrate.
5. (Original) The method according to claim 1, wherein after beginning

curing the underfill material and removing the film, curing includes:

curing the underfill material that is in contact with the film by conductive heat transfer from a mold press;
removing the film; and thereafter
curing the underfill material that is between the die and the mounting substrate by placing the package into a curing oven.

6. (Canceled).

7. (Previously Presented) The method according to claim 1, wherein after beginning curing the underfill material and removing the film, curing includes:

heating the package in the curing oven under conditions to cause the tacky film to release from the flip-chip assembly, wherein heating includes a first temperature ramp to a temperature range from about 100° C to about 180° C, a temperature hold at a temperature in this range, a second temperature ramp to a temperature range from about 140° C to about 260° C, and cooling.

8. (Previously Presented) The method according to claim 1, wherein after beginning curing the underfill material and removing the film, curing includes:

heating the package in the curing oven under conditions to cause the tacky film to release from the flip-chip assembly, wherein heating includes a single step temperature ramp to a temperature in a range from about 140° C to about 240° C;
and
cooling.

Claims 9-22. (Canceled)

23. (Previously Presented) A chip-packaging process system comprising:
a die;
a mounting substrate;

an electrical connection disposed between the mounting substrate and the die;

a tacky film that is disposed over the die and stretched onto the mounting substrate;

a mold press that gives a shape to the film;

a first heating source for ramping the temperature of the underfill material to a first cure state; and

a second heating source for causing the tacky film to release from the die, the fillet, and the mounting substrate; and

an underfill material disposed between the die and the mounting substrate; and an underfill inlet and outlet system that communicates through the film.

24. (Original) The chip-packaging process system according to claim 23, wherein the underfill inlet and outlet system includes an underfill conduit and a vent.

25. (Original) The chip-packaging process system according to claim 23, wherein the underfill material includes a fillet shape disposed between the die and the mounting substrate, and wherein the a mold press that gives shape to the film includes a heater element disposed at the fillet.

26. (Canceled)